

Please replace the paragraph on page 6, lines 14-20, with the following

paragraph:

a⁹ Accordingly, an object of the present invention is to overcome the above-mentioned drawbacks of the prior art by providing (1) an optical disc in which the data format including a user data, ID information, and control information is improved so that a same direction can be selected for disposition of the user data and control information as well as for error-correcting code, with no care about parities in the error-correcting codes for the ID information and user data; (2) a method of writing to the optical disc; and (3) a method of reading from the optical disc.

Please replace the paragraph on page 7, lines 12-15, with the following

paragraph:

a¹⁰ Yet further, the above object can be attained by providing an optical disc having each of the data formats in which an error-correcting code whose code distance is long (LDC) in one direction and the user data is arranged in the same direction as the error-correcting code.

IN THE CLAIMS

Please cancel Claims 1-7 without prejudice and replace therefor with new Claims 8-18 as shown in clean form below:²

a¹¹ 8. (New) An optical disc having a data format, comprising:
user data and control information disposed in a first block; and
ID information of a physical sector disposed in a second block,

² A marked-up copy of the amended portion of the claims is attached hereto.

wherein the first and second blocks are coded independently for error correction.

9. (New) The optical disc as set forth in claim 8, wherein the data format comprises an error-correcting code having a long distance code (LDC) in one direction; and the user data is arranged in a same direction as the error-correcting code.

10. (New) An optical disc having a data format, comprising:
user data, control information, and ID information of a physical sector each disposed in respective blocks,
wherein each respective block is coded independently for error correction.

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11. (New) The optical disc as set forth in claim 10, wherein the data format comprises an error-correcting code having a long distance code (LDC) in one direction; and the user data is arranged in a same direction as the error-correcting code.

12. (New) An optical disc having a data format, comprising:
user data disposed in a first block; and
control information and ID information of a physical sector disposed in a second block,
wherein the first and second blocks are coded independently for error correction.

13. (New) The optical disc as set forth in claim 12, wherein the data format comprises an error-correcting code having a long distance code (LDC) in one direction; and the user data is arranged in a same direction as the error-correcting code.

14. (New) A method of writing to an optical disc in a data format in which (1) user data, control information, and ID information of a physical sector are disposed each in respective blocks and are coded independently for error correction, or (2) the user data is disposed in a first block and the control information and the ID information of the physical sector are disposed in a second block and each block is coded independently for error correction, the method comprising:

one of (1) combining control information from an application program with other control information including a drive ID and a disc ID, and (2) converting the control information from the application program in an optical disc drive; and

one of encrypting and scrambling the user data with the control information thus combined or converted.

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15. (New) A method of writing to an optical disc in a data format in which (1) user data, control information, and ID information of a physical sector are disposed each in respective blocks and are coded independently for error correction, or (2) the user data is disposed in a first block and the control information and the ID information of the physical sector are disposed in a second block and each block is coded independently for error correction, the method comprising:

one of (1) combining control information from an application program with other control information including a drive ID or a disc ID, and (2) converting the control information from the application program in an optical disc drive; and

writing to the optical disc the information thus combined or converted as a block of control data.

16. (New) A method of reading data from an optical disc having a data format in which (1) user data, control information, and ID information of a physical sector are disposed each in respective blocks and are coded independently for error correction, or (2) the user data is disposed in a first block and the control information and the ID information of the physical sector are disposed in a second block and each block is coded independently for error correction, the method comprising:

one of decrypting and descrambling intra-block control information corresponding to the control information in the data format in the first block while sending in a second format the intra-block control information corresponding to the control information in the data format to an application program.

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17. (New) A method of writing to an optical disk in a data format in which user data is disposed in a first block and control information and ID information of a physical sector are disposed in a second block, wherein the first and second blocks are coded independently for error correction, the method comprising:

one of (1) combining control information from an application program with other control information including a drive ID or a disc ID, and (2) converting the control information from the application program in an optical disc drive; and

writing to the optical disc the information thus combined or converted as a block of control data.

18. (New) A method of writing to an optical disk, comprising:

coding a first ECC block for error correction such that user data with EDC is disposed in the first ECC block;